

Title (en)
POWER CONTROL METHOD, DEVICE AND COMMUNICATION TERMINAL FOR IMPROVING POWER AMPLIFIER SWITCH SPECTRUM

Title (de)
LEISTUNGSREGELUNGSVERFAHREN, VORRICHTUNG UND KOMMUNIKATIONSENDGERÄT ZUR VERBESSERUNG DES SCHALTSPEKTRUMS EINES LEISTUNGSVERSTÄRKERS

Title (fr)
PROCÉDÉ DE COMMANDE DE PUISSANCE, DISPOSITIF ET TERMINAL DE COMMUNICATION POUR AMÉLIORER LE SPECTRE DE COMMUTATION D'UN AMPLIFICATEUR DE PUISSANCE

Publication
EP 3223109 A1 20170927 (EN)

Application
EP 15860536 A 20151120

Priority
• CN 201410669957 A 20141120
• CN 201420700624 U 20141120
• CN 2015095228 W 20151120

Abstract (en)
A power control method and device for improving radio-frequency power amplifier (RF PA) switch spectrum, the method comprising the following steps: (a) detecting the gate voltage and drain voltage, or the gate voltage and supply voltage (vdd) of a pass element (105) to obtain the saturation information of the pass element (105); (b) if the saturation information indicates that the pass element (105) is about to leave the saturation working area, shunting the drain current of the pass element (105) to the error amplifier (102) to reduce the drain output voltage, thus reducing the variation of the output voltage, preventing the output voltage from quickly approaching the supply voltage (vdd), maintaining the saturation of the pass element (105), and improving the switch spectrum characteristics of RF PA.

IPC 8 full level
G05F 1/56 (2006.01); **H03F 1/02** (2006.01); **H03F 3/20** (2006.01)

CPC (source: EP US)
G05F 1/56 (2013.01 - EP US); **G05F 1/575** (2013.01 - EP US); **H03F 1/02** (2013.01 - EP US); **H03F 1/0238** (2013.01 - US);
H03F 3/193 (2013.01 - US); **H03F 3/20** (2013.01 - EP US); **H03F 3/21** (2013.01 - US); **H03F 2200/18** (2013.01 - US);
H03F 2200/451 (2013.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3223109 A1 20170927; EP 3223109 A4 20180829; EP 3223109 B1 20220427; US 10305430 B2 20190528; US 2017324380 A1 20171109;
WO 2016078620 A1 20160526

DOCDB simple family (application)
EP 15860536 A 20151120; CN 2015095228 W 20151120; US 201515528409 A 20151120